



## WR-51 Seamless Flexible Waveguide 36 Inch, Square Cover Flange Operating from 15 GHz to 22 GHz

### Flexible Waveguides Technical Data Sheet

PE-W51SF005-36

#### Features

- WR-51 waveguide
- Flexes in both the E and H plane
- 15 GHz to 22 GHz Frequency Range
- Brass flanges with a brass body
- Neoprene sleeve provides added protection and mechanical support

#### Applications

- Allows expansion/contraction due to thermal issues.
- Test Benches
- Microwave Radio
- Eliminates installation problems caused by misalignment.
- Pressurized waveguide systems
- Provides vibration isolation

#### Description

The PE-W51SF005-36 is part of Pasternack's family of flexible, seamless waveguides which operates in the 15 to 22 GHz range. The waveguide body is made of brass. It can be bent in both the E and H planes without impairing VSWR or attenuation. The waveguide is covered by a neoprene jacket which protects the waveguide and provides mechanical support.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
VSWR		1.1:1		
Insertion Loss		0.54		dB
Input Power			500	Watts
Peak Power			70	kWatts

#### Mechanical Specifications

Waveguide Size	WR-51
Waveguide Design	Seamless
Section Length	36 [in [914.4 mm]]
E-Plane Minimum Bend Radius, One Time	0.59 in [14.99 mm]
H-Plane Minimum Bend Radius, One Time	0.98 in [24.89 mm]
Maximum Operating Pressure	45 psig

Description	Flange 1	Waveguide	Flange 2
Type	Square Cover	WR-51	Square Cover
Designation	None		None
Material	Brass	Brass	Brass
Color	Gold	Black	Gold

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Seamless Flexible Waveguide 36 Inch, Square Cover Flange Operating from 15 GHz to 22 GHz PE-W51SF005-36](#)



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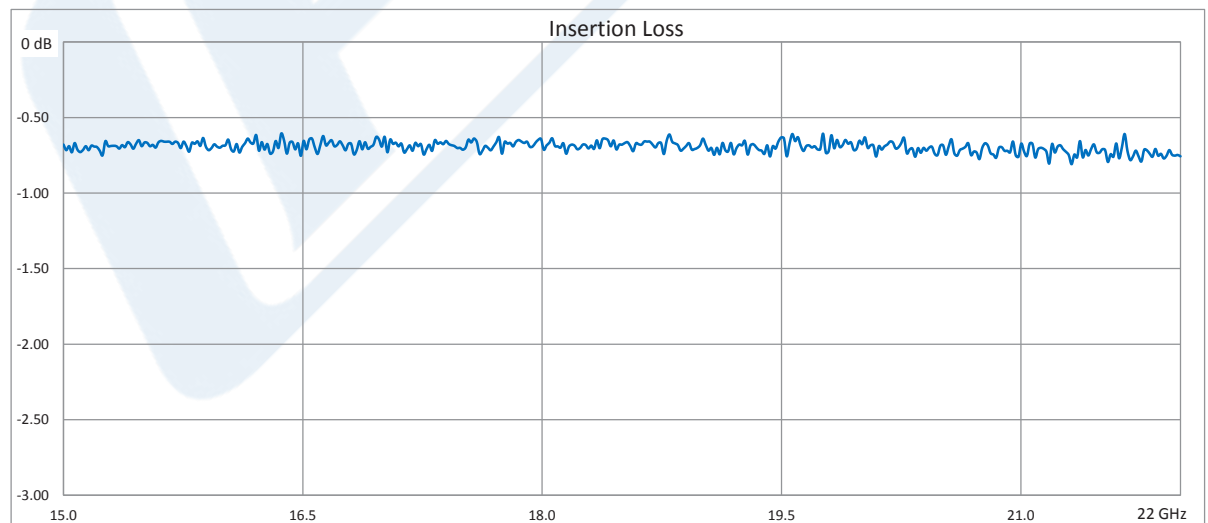
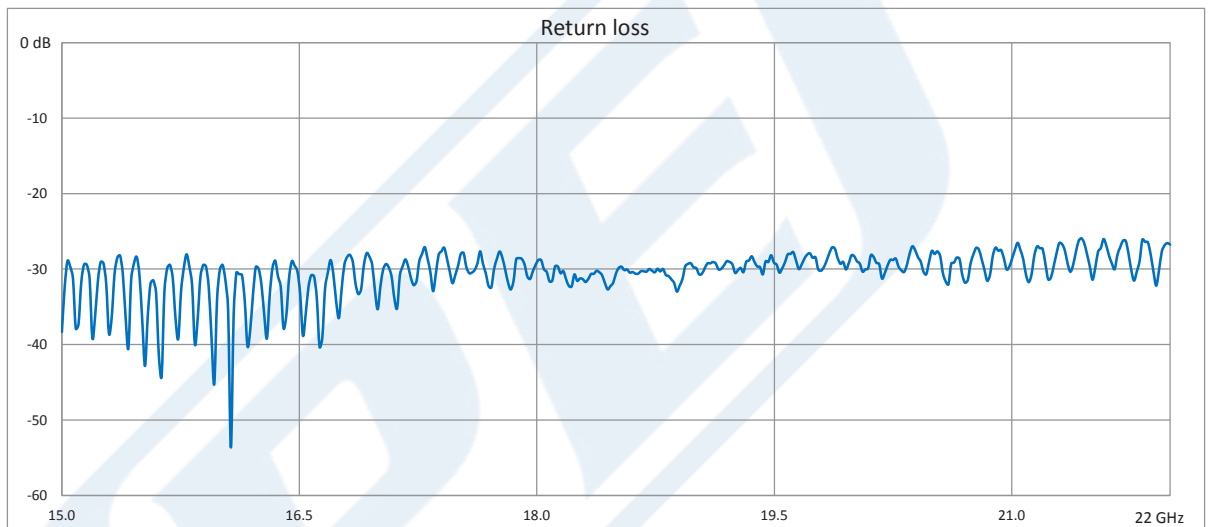
**Environmental Specifications**

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**



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WR-51 Seamless Flexible Waveguide 36 Inch, Square Cover Flange Operating from 15 GHz to 22 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

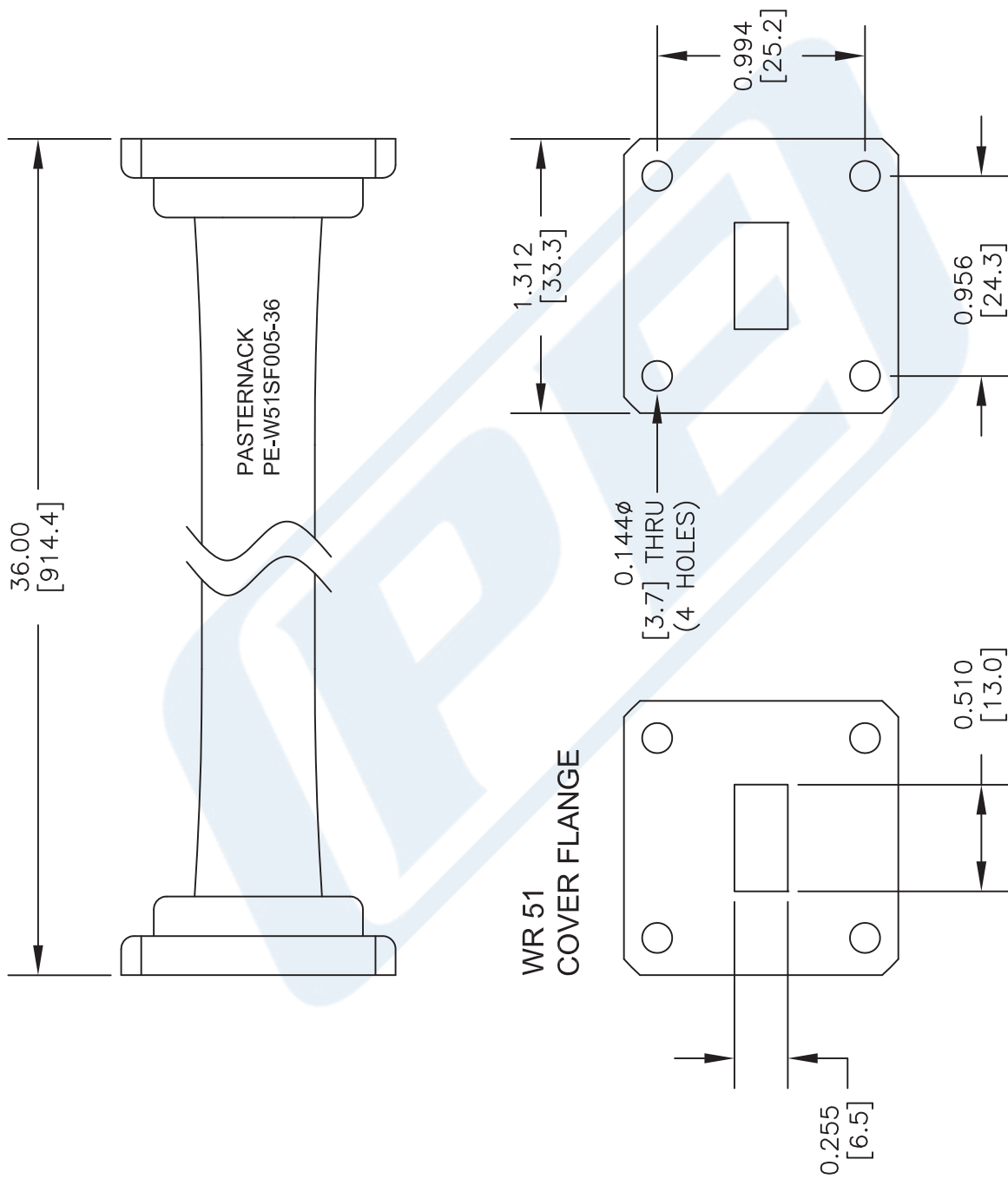
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE-W51SF005-36 CAD Drawing

WR-51 Seamless Flexible Waveguide 36 Inch, Square  
Cover Flange Operating from 15 GHz to 22 GHz



NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE-W51SF005-36**

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